



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,072	12/10/2003	Mark E. Tuttle	MI40-369	8908
21567	7590	04/15/2005	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			EVERHART, CARIDAD	
			ART UNIT	PAPER NUMBER
			2891	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,072

Applicant(s)

TUTTLE ET AL.

fm

Examiner

Caridad M. Everhart

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19 and 39-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-7-05</u> . | 6) <input type="checkbox"/> Other: ____ |

Applicant's response filed 3-23-05 and 3-07-05 to the requirements made in the Office Action of 1-5-05 are acknowledged.

Applicant's arguments with respect to claim 19 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 39-43 have been fully considered but they are not persuasive. Applicant has argued that there is not motivation for the combination of the references because there is no teaching in the references of how the components should be combined with which steps of the many embodiments of Marsh et al.. This argument is respectfully found to be not persuasive because there is found within Marsh et al motivation for the combination and the implication that the steps lacking in the Marsh et al reference may be performed. All of the steps are not taught in the Marsh et al reference, but the rejection is made in view of the combined references. For example, there is in Figure 23 shown a die in a cavity in a substrate with a polymeric protective coating 88 on the die and the substrate. Figure 18 shows that the structure can have an encapsulating layer further placed on it. In col. 2, lines 12-13 teach that there can be a coating which may comprise a label. This would correspond to an encapsulant which may comprise plastic sheet which may be laminated thereon, and, as implied by the fact that it is a label, there would be writing to allow it to be identified. This is further implied in col. 6, lines 23-25, in which it is again taught that the device could be an identification card or a price tag applied to an article of merchandise. This would again imply that it would be useful to have identification on an encapsulant. Therefore, this would provide motivation for the combination with Leighton. With

respect to the steps, Leighton teaches the lamination step for a card, as pointed out in the rejection made in the Office Action and repeated below. The card is the card taught by Marsh, et al in Fig. 23, and a plastic protective sheet which would have writing or identification would be laminated as taught by Leighton .

Applicant's arguments that the rejection under 35 USC 102(b) of claim 19 should be withdrawn was persuasive. However, a rejection in view of the same prior art as that applied in the Office Action of 1-5-05 is made below under 35 USC 103.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 4,960,983).

Inoue discloses a method of forming a device which includes the formation of a recess in a substrate(Fig. 6 shows a recess in the substrate body 52). The antenna portions 54a are shown in the recess. The antenna is a coil (col. 6, lines 13-26). An integrated circuit which includes a logic circuit is in the recess(col. 6, lines 13-26). It is connected(Fig. 6, element 54b) to the antenna(Fig. 6 and col. 6,lines 13-26). The antenna is seen to cross itself in that the windings cross each other as seen in Fig. 6, and as the antenna is coiled with a plurality of windings(col. 5, lines 27-40), and as shown in Fig. 6, dielectric is between the portions which cross each other, as 52 is dielectric material(col. 6, lines 16-19).

Art Unit: 2891

Although Inoue discloses an induction coil, which is an antenna, Inoue does not teach an RF antenna.

Although Inoue teaches an inductive coil rather than an RF antenna, it would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the method taught by Inoue to an RF antenna because an RF antenna is an induction coil which one of ordinary skill in the art would have been able to design by adjusting such properties as the impedance, resistance, width, the area occupied by the coil.

Claims 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh, et al. (US 5,566,441) in view of Leighton (6,514,367B1).

Marsh, et al disclose a method which includes the steps of forming a cavity in a plastic substrate(col. 1, lines 60-68); that the cavity slopes is seen in Fig. 19; an integrated circuit is provided in the cavity, which has radio frequency circuitry, as the circuit is a transponder(col. 1, lines 20-30 and col. 2,lines 14-15 which identifies the transponder as the circuit), which is known in the art to be a radio frequency circuit for transmitting a signal; the antenna is printed (col. 1,lines 27-29), and at least part in the cavity and part on the upper part of the substrate(Fig. 19 and col. 5,lines 54-62); adhesive is used to adhere the antenna to the integrated circuit (col. 5,lines 30-35).

Marsh, et al does not teach the laminating a flexible plastic film step, although Marsh et al does disclose that the housing may have two components, between which the chip is located(col. 6,lines 20-25).

Art Unit: 2891

Leighton discloses a process for laminating an RFID card with a plastic sheet and then printing ink on the card(col. 4, lines 59-62; col. 5, lines 39-43; col. 5, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the process taught by Marsh, et al with the steps taught by Leighton in order to make the card taught by Marsh, et al easily identifiable and to provide a protective covering, and because Marsh et al contains the suggestion that the device may have an upper and a lower plastic portion in the lines cited above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caridad M. Everhart whose telephone number is 571-272-1892. The examiner can normally be reached on Monday through Fridays 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, B. Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CME
4-13-2005

C. Everhart
CARIDAD EVERHART
PRIMARY EXAMINER